

# UTILITY PATENT APPLICATION TRANSMITTAL

|                        |   |
|------------------------|---|
| Attorney Docket No.    | 500.34077CC3                            |
| First Inventor         | Atsushi MAKI et al.                     |
| Title                  | Optical System For Measuring Metabolism |
| Express Mail Label No. |   |

(Only for new nonprovisional applications under 37 CFR 1.53(b))

## APPLICATION ELEMENTS

## ADDRESS TO:

Assistant Commissioner for Patents  
 Box Patent Application  
 Washington, DC 20231

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
- Applicant claims small entity status.  
See 37 CFR 1.27.
- Specification [Total Pages  ]  
*(preferred arrangement set forth below)*
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- Verf'd Dec. w/Eng. X-latn Drawing(s) (35 U.S.C. 113) [ Total Sheets  ]
- Oath or Declaration [ Total Pages  ]
  - Newly executed (original or copy)
  - Copy from a prior application (37 CFR 1.63 (d))  
*(for continuation/divisional with Box 18 completed)*
    - DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

- CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
- Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - Computer Readable Form (CRF)
  - Specification Sequence Listing on:
    - CD-ROM or CD-R (2 copies); or
    - paper
  - Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

- Assignment Papers (cover sheet & document(s))
- 37 CFR 3.73(b) Statement (when there is an assignee)  Power of Attorney
- English Translation Document (if applicable)
- Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
- Preliminary Amendment
- Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
- Certified Copy of Priority Document(s) (if foreign priority is claimed)
- Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- Other: Letter to Official Drafts-person and Form PTO-2038..

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation  Divisional  Continuation-in-part (CIP) of prior application No.: 09 / 203,610

Prior application information: Examiner E. Mantis Mercader Group Art Unit: 3737

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. ~~The incorporation may only be relied upon when the prior art has been introduced by the applicant into the prosecution.~~

## 19. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label  020457 or  Correspondence address below  
*(Insert Customer No. or Attach bar code label here)*

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|---------|---|-----------|--------------|------------------|
| Name    | ANTONELLI, TERRY, STOUT & KRAUS, LLP        |           |              |                  |
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| City    | Arlington                                   | State     | Virginia     | Zip Code 22209   |
| Country | USA   | Telephone | 703-312-6600 | Fax 703-312-6666 |

|                   |                            |                                   |             |
|-------------------|----------------------------|-----------------------------------|-------------|
| Name (Print/Type) | Paul J. Skwierawski        | Registration No. (Attorney/Agent) | 32,173      |
| Signature         | <i>Paul J. Skwierawski</i> | Date                              | 9 July 2001 |

|   |                      |  |
|---|----------------------|--|
| <h1 style="margin: 0;">FEE TRANSMITTAL</h1> <h2 style="margin: 0;">for FY 2001</h2> <p style="margin: 5px 0 0 20px;"><i>Patent fees are subject to annual revision.</i></p> | Complete if Known    |  |
|   | Application Number   | Unassigned                             |
|   | Filing Date          | 9 July 2001                            |
|   | First Named Inventor | Atsushi MAKI et al.                    |
|   | Examiner Name        | Unassigned (Parent-E. Mantis Mercader) |
|   | Group / Art Unit     | Unassigned (Parent-3737)               |
| TOTAL AMOUNT OF PAYMENT   | (\$)                 | 710                                    |
| Attorney Docket No.   | 500.34077CC3         |  |

| <p><b>METHOD OF PAYMENT (check one)</b></p> <p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:</p> <p>Deposit Account Number: 01-2135 (Order No. 500.34077CC3)</p> <p>Deposit Account Name: ANTONELLI, TERRY, STOUT &amp; KRAUS, LLP</p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed:</p> <p style="margin-left: 20px;"><input type="checkbox"/> Check    <input checked="" type="checkbox"/> Credit card    <input type="checkbox"/> Money Order    <input type="checkbox"/> Other</p>   | <p><b>FEE CALCULATION (continued)</b></p> <p><b>3. ADDITIONAL FEES</b></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,390</td><td>218</td><td>695</td><td>Extension for reply within fourth-month</td><td></td></tr> <tr><td>128</td><td>1,890</td><td>228</td><td>945</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,240</td><td>241</td><td>620</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,240</td><td>242</td><td>620</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>440</td><td>243</td><td>220</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>600</td><td>244</td><td>300</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>130</td><td>123</td><td>130</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>710</td><td>246</td><td>355</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>710</td><td>249</td><td>355</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>710</td><td>279</td><td>355</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> </tbody> </table> <p>Other fee (specify) _____</p> <p>*Reduced by Basic Filing Fee Paid      SUBTOTAL (3)      (\$)</p> | Fee Code        | Large Entity Fee (\$) | Fee Code   | Small Entity Fee (\$) | Fee Description | Fee Paid | 105 | 130 | 205            | 65                 | Surcharge - late filing fee or oath |          | 127 | 50  | 227 | 25                | Surcharge - late provisional filing fee or cover sheet. |     | 139 | 130 | 139 | 130              | Non-English specification |     | 147 | 2,520 | 147 | 2,520              | For filing a request for reexamination |     | 112 | 920* | 112 | 920*                   | Requesting publication of SIR prior to Examiner action |  | 113          | 1,840* | 113 | 1,840* | Requesting publication of SIR after Examiner action |              | 115 | 110 | 215 | 55 | Extension for reply within first month |   | 116 | 390      | 216                | 195 | Extension for reply within second month |   | 117 | 890 | 217 | 445 | Extension for reply within third month |   | 118 | 1,390 | 218 | 695 | Extension for reply within fourth-month |   | 128 | 1,890 | 228 | 945 | Extension for reply within fifth month |   | 119 | 310 | 219 | 155 | Notice of Appeal |  | 120            | 310             | 220            | 155             | Filing a brief in support of an appeal |          | 121 | 270 | 221 | 135 | Request for oral hearing |  | 138 | 1,510 | 138 | 1,510 | Petition to institute a public use proceeding |  | 140 | 110 | 240 | 55  | Petition to revive - unavoidable      |  | 141 | 1,240 | 241 | 620 | Petition to revive - unintentional                 |  | 142 | 1,240 | 242 | 620 | Utility issue fee (or reissue)                             |  | 143 | 440 | 243 | 220 | Design issue fee |  | 144 | 600 | 244 | 300 | Plant issue fee |  | 122 | 130 | 122 | 130 | Petitions to the Commissioner |  | 123 | 130 | 123 | 130 | Petitions related to provisional applications |  | 126 | 180 | 126 | 180 | Submission of Information Disclosure Stmt |  | 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) |  | 146 | 710 | 246 | 355 | Filing a submission after final rejection (37 CFR § 1.129(a)) |  | 149 | 710 | 249 | 355 | For each additional invention to be examined (37 CFR § 1.129(b)) |  | 179 | 710 | 279 | 355 | Request for Continued Examination (RCE) |  | 169 | 900 | 169 | 900 | Request for expedited examination of a design application |  |
|--|---|-----------------|-----------------------|--|-----------------------|-----------------|----------|-----|-----|----------------|--------------------|-------------------------------------|----------|-----|-----|-----|-------------------|---|-----|-----|-----|-----|------------------|---------------------------|-----|-----|-------|-----|--------------------|--|-----|-----|------|-----|------------------------|--|--|--------------|--------|-----|--------|---|--------------|-----|-----|-----|----|--|---|-----|----------|--------------------|-----|---|---|-----|-----|-----|-----|--|---|-----|-------|-----|-----|---|---|-----|-------|-----|-----|--|---|-----|-----|-----|-----|------------------|--|----------------|-----------------|----------------|-----------------|--|----------|-----|-----|-----|-----|--------------------------|--|-----|-------|-----|-------|---|--|-----|-----|-----|-----|---------------------------------------|--|-----|-------|-----|-----|--|--|-----|-------|-----|-----|--|--|-----|-----|-----|-----|------------------|--|-----|-----|-----|-----|-----------------|--|-----|-----|-----|-----|-------------------------------|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|---|--|-----|----|-----|----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|---|--|
| Fee Code   | Large Entity Fee (\$)   | Fee Code        | Small Entity Fee (\$) | Fee Description  | Fee Paid              |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 105  | 130   | 205             | 65                    | Surcharge - late filing fee or oath  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 127  | 50  | 227             | 25                    | Surcharge - late provisional filing fee or cover sheet.                    |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 139  | 130   | 139             | 130                   | Non-English specification  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 147  | 2,520   | 147             | 2,520                 | For filing a request for reexamination                                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 112  | 920*  | 112             | 920*                  | Requesting publication of SIR prior to Examiner action                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 113  | 1,840*  | 113             | 1,840*                | Requesting publication of SIR after Examiner action                        |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 115  | 110   | 215             | 55                    | Extension for reply within first month                                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 116  | 390   | 216             | 195                   | Extension for reply within second month                                    |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 117  | 890   | 217             | 445                   | Extension for reply within third month                                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 118  | 1,390   | 218             | 695                   | Extension for reply within fourth-month                                    |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 128  | 1,890   | 228             | 945                   | Extension for reply within fifth month                                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 119  | 310   | 219             | 155                   | Notice of Appeal   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 120  | 310   | 220             | 155                   | Filing a brief in support of an appeal                                     |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 121  | 270   | 221             | 135                   | Request for oral hearing   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 138  | 1,510   | 138             | 1,510                 | Petition to institute a public use proceeding                              |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 140  | 110   | 240             | 55                    | Petition to revive - unavoidable   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 141  | 1,240   | 241             | 620                   | Petition to revive - unintentional   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 142  | 1,240   | 242             | 620                   | Utility issue fee (or reissue)   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 143  | 440   | 243             | 220                   | Design issue fee   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 144  | 600   | 244             | 300                   | Plant issue fee  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 122  | 130   | 122             | 130                   | Petitions to the Commissioner  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 123  | 130   | 123             | 130                   | Petitions related to provisional applications                              |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 126  | 180   | 126             | 180                   | Submission of Information Disclosure Stmt                                  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 581  | 40  | 581             | 40                    | Recording each patent assignment per property (times number of properties) |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 146  | 710   | 246             | 355                   | Filing a submission after final rejection (37 CFR § 1.129(a))              |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 149  | 710   | 249             | 355                   | For each additional invention to be examined (37 CFR § 1.129(b))           |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 179  | 710   | 279             | 355                   | Request for Continued Examination (RCE)                                    |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 169  | 900   | 169             | 900                   | Request for expedited examination of a design application                  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| <p><b>FEE CALCULATION</b></p> <p><b>1. BASIC FILING FEE</b></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>710</td><td>201</td><td>355</td><td>Utility filing fee</td><td>710</td></tr> <tr><td>106</td><td>320</td><td>206</td><td>160</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>490</td><td>207</td><td>245</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>710</td><td>208</td><td>355</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>150</td><td>214</td><td>75</td><td>Provisional filing fee</td><td></td></tr> </tbody> </table> <p style="text-align: right;"><b>SUBTOTAL (1)</b>      (\$) 710</p> | Large Fee Code  | Entity Fee (\$) | Small Fee Code        | Entity Fee (\$)  | Fee Description       | Fee Paid        | 101      | 710 | 201 | 355            | Utility filing fee | 710                                 | 106      | 320 | 206 | 160 | Design filing fee |   | 107 | 490 | 207 | 245 | Plant filing fee |                           | 108 | 710 | 208   | 355 | Reissue filing fee |  | 114 | 150 | 214  | 75  | Provisional filing fee |  | <p><b>2. EXTRA CLAIM FEES</b></p> <table style="width: 100%; font-size: x-small;"> <tr> <td>Total Claims</td> <td>19</td> <td>-20</td> <td>=</td> <td>0</td> <td>Extra Claims</td> <td>X</td> <td>18</td> <td>=</td> <td>0</td> <td>Fee from below</td> <td>=</td> <td>0</td> <td>Fee Paid</td> </tr> <tr> <td>Independent Claims</td> <td>1</td> <td>-3</td> <td>=</td> <td>0</td> <td></td> <td>X</td> <td>0</td> <td>=</td> <td>0</td> <td></td> <td>=</td> <td>0</td> <td></td> </tr> <tr> <td>Multiple Dependent</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>0</td> <td>=</td> <td>0</td> <td></td> <td>=</td> <td>0</td> <td></td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102</td><td>80</td><td>202</td><td>40</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104</td><td>270</td><td>204</td><td>135</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>109</td><td>80</td><td>209</td><td>40</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> </tbody> </table> <p style="text-align: right;"><b>SUBTOTAL (2)</b>      (\$) 0</p> | Total Claims | 19     | -20 | =      | 0   | Extra Claims | X   | 18  | =   | 0  | Fee from below                         | = | 0   | Fee Paid | Independent Claims | 1   | -3                                      | = | 0   |     | X   | 0   | =                                      | 0 |     | =     | 0   |     | Multiple Dependent                      | 0 |     |       |     |     | X                                      | 0 | =   | 0   |     | =   | 0                |  | Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description                        | Fee Paid | 103 | 18  | 203 | 9   | Claims in excess of 20   |  | 102 | 80    | 202 | 40    | Independent claims in excess of 3             |  | 104 | 270 | 204 | 135 | Multiple dependent claim, if not paid |  | 109 | 80    | 209 | 40  | ** Reissue independent claims over original patent |  | 110 | 18    | 210 | 9   | ** Reissue claims in excess of 20 and over original patent |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Large Fee Code   | Entity Fee (\$)   | Small Fee Code  | Entity Fee (\$)       | Fee Description  | Fee Paid              |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 101  | 710   | 201             | 355                   | Utility filing fee   | 710                   |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 106  | 320   | 206             | 160                   | Design filing fee  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 107  | 490   | 207             | 245                   | Plant filing fee   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 108  | 710   | 208             | 355                   | Reissue filing fee   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 114  | 150   | 214             | 75                    | Provisional filing fee   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Total Claims   | 19  | -20             | =                     | 0  | Extra Claims          | X               | 18       | =   | 0   | Fee from below | =                  | 0                                   | Fee Paid |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Independent Claims   | 1   | -3              | =                     | 0  |                       | X               | 0        | =   | 0   |                | =                  | 0                                   |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Multiple Dependent   | 0   |                 |                       |  |                       | X               | 0        | =   | 0   |                | =                  | 0                                   |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Large Fee Code   | Entity Fee (\$)   | Small Fee Code  | Entity Fee (\$)       | Fee Description  | Fee Paid              |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 103  | 18  | 203             | 9                     | Claims in excess of 20   |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 102  | 80  | 202             | 40                    | Independent claims in excess of 3  |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 104  | 270   | 204             | 135                   | Multiple dependent claim, if not paid                                      |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 109  | 80  | 209             | 40                    | ** Reissue independent claims over original patent                         |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 110  | 18  | 210             | 9                     | ** Reissue claims in excess of 20 and over original patent                 |                       |                 |          |     |     |                |                    |                                     |          |     |     |     |                   |   |     |     |     |     |                  |                           |     |     |       |     |                    |  |     |     |      |     |                        |  |  |              |        |     |        |   |              |     |     |     |    |  |   |     |          |                    |     |   |   |     |     |     |     |  |   |     |       |     |     |   |   |     |       |     |     |  |   |     |     |     |     |                  |  |                |                 |                |                 |  |          |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |     |                                       |  |     |       |     |     |  |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |     |     |     |   |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |

|                   |                     |                                 |        |                          |                            |
|-------------------|---------------------|---------------------------------|--------|--------------------------|----------------------------|
| SUBMITTED BY      |                     |                                 |        | Complete (if applicable) |                            |
| Name (Print/Type) | Paul J. Skwierawski | Registration No. Attorney/Agent | 32,173 | Telephone                | 703-312-6636 (Direct Dial) |
| Signature         |                     |                                 |        | Date                     | 9 July 2001                |

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Atsushi MAKI *et al.*  
Serial No.: Unassigned (§53b Continuation of 09/203,610 filed 2 December 1998)  
Filed: 9 July 2001  
For: OPTICAL SYSTEM FOR MEASURING  
METABOLISM IN A BODY AND IMAGING METHOD  
Group: Unassigned (Parent Application AU 3737)  
Examiner: Unassigned (Parent Application Examiner E. Mantis Mercader)

**LETTER TO THE OFFICIAL DRAFTSPERSON**

Assistant Commissioner for Patents  
Washington, D.C. 20231  
ATTENTION: Ms. Bridget Gray

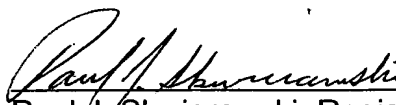
9 July 2001

Sir:

In the matter of the above-identified application, Applicants hereby submit twenty-one (21) pages of formal drawings for Figures 1-10, 11A, 11B, 12A, 12B, 13-16, 17A, 17B and 18-23.

Approval and entry of the attached formal drawings are courteously solicited.

Respectfully submitted,



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**ATTACHMENTS:** Formal Drawings (21 sheets)-FIGs. 1-23